

Title (en)  
SYSTEMS AND METHODS FOR BEAM ENHANCEMENT

Title (de)  
SYSTEME UND VERFAHREN ZUR STRAHLVERSTÄRKUNG

Title (fr)  
SYSTÈMES ET PROCÉDÉS DESTINÉS À INTENSIFIER DES FAISCEAUX

Publication  
**EP 2498683 A1 20120919 (EN)**

Application  
**EP 10829276 A 20101109**

Priority

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Abstract (en)  
[origin: WO2011057252A1] Beam enhancement through sidelobe reduction and/or mainlobe sharpening is shown. Embodiments utilize dynamic resolution, improved dynamic resolution, and/or enhanced dynamic resolution techniques to synthesize beams, such as ultrasonic beams used in ultrasonic imaging, having desired attributes. Embodiments simultaneously form a first sample beam and a second or auxiliary sample beam for every sample to synthesize enhanced scan beams. According to a dynamic resolution techniques herein a new beam may be formed from the sum of the two sample beams. A synthesized dynamic resolution beam of embodiments has reduced sidelobes with relatively little or no spread of the mainlobe. An enhanced dynamic resolution beam sharpening function can be applied to provide a further enhanced beam, such as to further narrow the mainlobe.

IPC 8 full level  
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